(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 27 October 2005 (27.10.2005)

PCT

(10) International Publication Number WO 2005/101559 A1

(51) International Patent Classification⁷: H01M 8/04, 8/02

(21) International Application Number:

PCT/KR2004/000892

(22) International Filing Date: 19 April 2004 (19.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant (for all designated States except US): LG ELECTRONICS INC. [KR/KR]; 20, Yoido-dong, Youngdungpo-gu, Seoul 150-721 (KR).

(72) Inventors; and

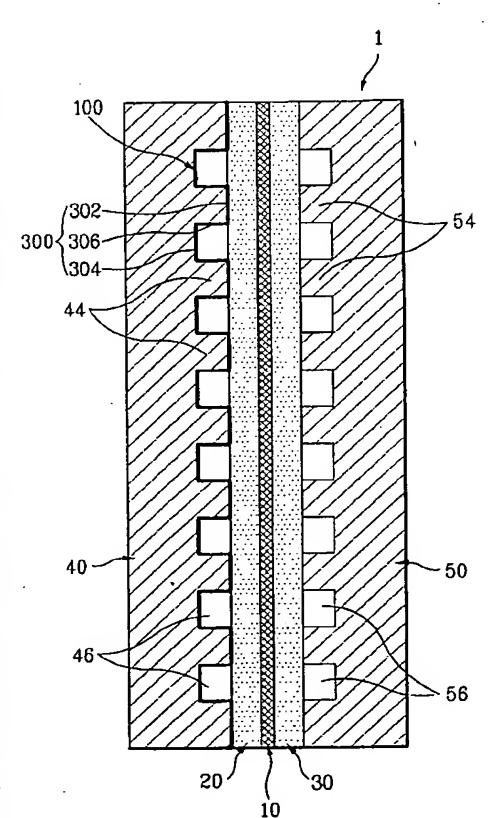
(75) Inventors/Applicants (for US only): CHO, Tae Hee [KR/KR]; Sungwon APT., 307-303, Sangnam-dong, Changwon-si, Gyeongsangnam-do, 631-050 (KR). CHOI, Hong [KR/KR]; Sungwon APT., 308-2204, Sangnam-dong, 45-1. Changwon-si, Gyeongsangnam-do

631-050 (KR). KIM, Kyu Jung [KR/KR]; Hyundai Town House Na-101, Gumi-dong, 236, Bundang-gu, Sungnam-si, Gyeonggi-do 463-802 (KR). HEO, Seong Geun [KR/KR]; Namsung Hanvit APT., 102-905, Seodacsin-dong 3-ga, Sco-gu, Busan 602-752 (KR). KIM, Cheol Hwan [KR/KR]; Buyoung APT., 1205-703, Bugok-ri, Jangyu-myeon,, Gimhae-si, Gyeongsangnam-do 622-833 (KR). HWANG, Young Jun [KR/KR]; H-324 LG Electronics Dormitory, Gaumjung-dong, 14-5, Changwon-si, Gycongsangnam-do 641-711 (KR). PARK, Myung Seok [KR/KR]; Woosung APT., 107-103, Poongho-dong, 83-3, Jinhae-si, Gyeongsangnam-do 645-750 (KR). KO, Seung Tae [KR/KR]; Daemyeong 6-dong, 1450-8, Nam-gu, Daegu 705-807 (KR). LEE, Myeong Ho [KR/KR]; Chunggu APT., 104-1401, Juryc 1-dong, 955-2, Sasang-gu, Busan 617-836 (KR).

(74) Agents: BAHNG, Hae Cheol et al.; Kims International Patent & Law Office, 15th Floor Yo Sam Building, 648-23, Yeoksam-dong, Kangnam-gu. Seoul 135-080 (KR).

[Continued on next page]

(54) Title: FUEL CELL



(57) Abstract: Fuel cell including electrolyte, an anode and a cathode at opposite sides of the electrolyte, an anode side separator and a cathode side separator at outer sides of the anode and the cathode respectively, and a medium layer between the cathode and the cathode side separator for prevention of corrosion of the cathode side separator, thereby improving a performance of an electric generating performance of the fuel cell.

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.